REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested.

Claims 1-7, 10, 19 and 20-22 stand rejected under 35 USC 103 as allegedly being obvious over Tanekawa et al and further in view of Morishige. Withdrawal of the rejection is submitted to be in order for the reasons that follow.

The present invention provides a simple and cost-effective process for the production of a composition containing 5'-ribonucleotides which is based on autolysis of a microorganism. The resulting composition is clean in taste.

Tanekawa et al relates to a process for making a yeast extract containing 5'-ribonucleotides. The process starts by autolysis at a pH between 6.0 and 6.6 (col. 2, lines 32-35). In order to minimize decomposition of RNA in the autolyzed cells, the autolysis must be carried out at a constant pH (col. 3, lines 30-35). Before the RNA is converted to 5'-ribonucleotides, it is extracted from the autolyzed yeast cells (col. 3, lines 41-44).

On page 2 of the Action, the Examiner contends that Tanekawa et al discloses that the cell wall fraction contains 50-80% intracellular RNA. Applicants respectfully submit that no such disclosure is found in Tanekawa et al. Nowhere in Tanekawa et al is there any reference to RNA associated with the cell wall. As Applicants have pointed out previously, what Tanekawa et al actually states is that "50-80% of the RNA remains not decomposed in the autolysed yeast cells ..." (emphasis added).

Morishige et al relates to a nutritional agent that promotes recovery from conditions of cerebrospinal degenerative diseases. The nutritional agent may contain RNA, which can be obtained from Brewer's or Baker's yeast (col. 2, lines 7-10). The RNA is extracted and isolated

by adding NaCl, heating, adding concentrated hydrochloric acid, and also adding an organic solvent.

Applicants submit that the teachings of Tanekawa et al and Morishige are technically incompatible with each other and, therefore, would not have been combined by one skilled in the art.

Firstly, Tanekawa et al teaches that the pH during the extraction must be constant and in the range between 6.0 and 6.6 (col. 2, lines 34-35). In contrast, in the method of Morishige, concentrated hydrochloric acid is added. It is well known that adding concentrated hydrochloric acid will lower the pH well below 6.0, probably even well below 3.0.

Secondly, in Morishige, after adding the concentrated hydrochloric acid, the material is neutralized again (col. 2, line 22). This means that the pH in Morishige is not constant, as specifically taught by Tanekawa et al but, instead, alternates between neutral, then extremely acidic, and finally neutral again. This is exactly opposite to the method of Tanekawa et al, who teaches a constant pH, see col. 2, line 34, and also col. 3, lines 19-21, where it is stressed that "[a]s autolysis proceeds... it is necessary to control the pH within the desirable range".

Thirdly, in Morishige, an organic solvent such as ethanol is added (col. 2, line 24). In contrast, in the method of Tanekawa et al no organic solvent is added. Hence, the chemical composition of the material before solid-liquid separation in Morishige is entirely different from that in Tanekawa et al. Therefore, it would not have been at all obvious that, if the isolated solid fraction of Morishige contains RNA (col. 2, lines 25-28), the insoluble residue of Tanekawa et al (col. 2, line 44) would also contain RNA. In fact, Tanegawa et al suggests the opposite, namely that the RNA is in the soluble fraction, since Tanekawa et al teaches the reader to remove the insoluble residue (col. 4, lines 13-15).

A skilled person seeking a simple and effective process for the production of compositions containing 5'-ribonucleotides, by reading Tanekawa et al, would have been discouraged from using the method of Morishige, since the forrmer teaches opening the cells by using a pH of between pH 6.0-6.6, which must be constant, whereas Morishige teaches one to use concentrated hydrochloric acid and a organic solvent.

In view of the above, it will be clear that the combination upon which the Examiner relies would not have rendered that instant invention obvious. Reconsideration is requested.

Claims 8 and 9 stand rejected under 35 USC 103 as allegedly being obvious over Tanekawa et al and further in view of Morishige and further in view of Halasz. Withdrawal of the rejection is submitted to be in order for the reasons that follow.

The fundamental failings of Tanekawa et al and Morishige are detailed above. Nothing in Halasz would have brought one skilled in the art closer to the claimed invention. Accordingly, reconsideration is requested.

Claims 1, 4, 7 and 10 stand provisionally rejected as representing obviousness-type double patenting over claims 6, 8, 9, 11, 13, 20, 26, 27 and 30 of U.S. Appln. No. 10/541,194. The possibility of filing a Terminal Disclaimer is noted. Given the provisional nature of the rejection, it is again requested that it be held in abeyance until the case is otherwise in condition for allowance.

This application is submitted to be in condition for allowance and a Notice to that effect is requested.

NOORDAM et al
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Respectfully submitted,

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